

REMARKS

Claims 1-23 and 29-39 are pending. Claims 24-28 have been canceled without prejudice to or disclaimer of the subject matter recited therein. Claims 1, 5, 18 and 20 have been amended. New claims 29-39 have been added. Applicants respectfully request reconsideration of the application in response to the non-final Office Action.

Applicants thank the Examiner for the telephonic interview with Applicants' representative on September 13, 2006, which did not result in resolution of all issues.

Claim Rejection Under 35 U.S.C. § 101

Claims 1-17 and 24-28

Claims 1-17 and 24-28 have been rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter because they do not appear to produce a tangible result. Applicants traverse the rejection for at least the following reasons.

Claim 1, as amended, recites a method of generating an input file using a meta language regarding graphics data compression, that includes, among other steps, "generating the file, which is to be input to the data compression encoder, by parsing the input XML file based on the XML schema and the style sheets," and "inputting the generated file to the data compression encoder to generate an encoded bitstream of compressed graphics data." For example, as described in conjunction with FIG. 1 of the instant application, in one embodiment, an XML input

file 100 is parsed using XMT schema 120 and a style sheet 130 to generate a file, which is output to a data compression encoder 140. (See, Specification at page 8, lines 14-22). In this way, 3D data can be compressed based on a method of representing the factors for compression of 3D data using a meta language. (See, Specification at page 8, lines 11-13).

Similarly, claim 5, as amended, recites a method of generating an input file using a meta language regarding graphics data compression, that includes, among other steps, "generating the scene file and the mux file by parsing the input XMT file using the XMT schema and the XMT2BIFS and XMT2MUX style sheets, respectively," and "inputting the generated scene file and mux file to a data compression encoder to generate an encoded bitstream of compressed graphics data." For example, as described in conjunction with FIG. 2 of the instant application, in one embodiment, an input XMT file can be parsed based on definitions in an XMT-A schema 240, an XMT2MUX style sheet 220, and an XMT2BIFS style sheet 230 to generate a file, which is output to an MPEG-4 encoder. (See, Specification at page 9, lines 26-30). In this embodiment, an .mp4 encoded bitstream is generated, which can be visualized by an MPEG-4 player and displayed on a display. (See, Specification at page 9, lines 30-33).

Applicants submit that independent claims 1 and 5 are directed to statutory subject matter under 35 U.S.C. §101 because the methods provide a practical application that produces a "useful, tangible, and concrete" result. (See, *Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility* ("Interim Guidelines"), Section IV(C)(2), United States Patent and Trademark Office Official Gazette Notices (November 22, 2005)).

First, the result provided by claims 1 and 5 is "useful" because it is "specific." Applicants submit that the specification of the instant application discloses a specific use for the invention recited in claims 1 and 5 and identifies with specificity why it is considered useful. (See, MPEP § 2107.01(I)(A)). For example, the input file generation methods for data compression recited in claims 1 and 5 are useful because they allow an author to easily use and compress 3D data with the meta language while authoring 3D contents. (See, Specification at page 45, lines 21-24). In particular, since the methods allow an author to compress 3D data during the authoring process, it is possible to visualize graphics data or animation data in real time, even at a low network bandwidth. (See, Specification at page 45, line 33 to page 46, line 1).

Second, the result provided by claims 1 and 5 is also "useful" because it is "substantial." In particular, the methods recited in claims 1 and 5 define a "real world" use without requiring further research to identify such "real world" context of use. (See, MPEP § 2107.01(I)(B)). For example, the specification describes the exemplary "real world" context of graphics data writing, where easy compression of animation data and representation data related to 3D contents made by an author is desired. (See, Specification at page 1, line 13 and lines 25-27).

Third, Applicants submit that the "specific" and "substantial" utility identified above for the methods recited in claims 1 and 5 would be considered "credible" by a person of ordinary skill in the art. (See, MPEP § 2107(II)(B)(1)).

Additionally, the result provided by claims 1 and 5 is "tangible" because it is not "abstract." (See, Interim Guidelines at IV(C)(2)(b)(2)). In other words, generating an encoded bitstream of compressed graphics data is a beneficial result

or effect in that 3D data is compressed based on methods of representing the factors for compression of 3D data using a meta language. (See, Specification at page 8, lines 11-13). The methods of adjusting factors needed to author, represent, process, and compress 3D contents is required for an author to easily process compressed 3D data. (See, Specification at page 7, lines 5-7).

Finally, the result provided by claims 1 and 5 is "concrete" because the result can be substantially repeatable. (See, Interim Guidelines at IV(C)(2)(b)(3)). For example, each time the methods of claims 1 and 5 are executed, an encoded bitstream of compressed graphics data will be generated. Thus for at least all of these reasons, independent claims 1 and 5 provide a practical application that produces a "useful, tangible, and concrete" result and are therefore directed to statutory subject matter under 35 U.S.C. § 101. Accordingly, Applicants respectfully request that the rejection under 35 U.S.C. § 101 of claims 1 and 5, and of claims 2-4 and 6-17, which depend therefrom, be withdrawn. Claims 24-28 have been canceled thereby rendering the rejection of claims 24-28 under 35 U.S.C. § 101 moot.

New Claims 29-33

Further, Applicants submit that new independent claims 29-33 are likewise directed to statutory subject matter under 35 U.S.C. §101. Among other steps, the methods of claims 29-33 include the steps of "inputting the generated file to the data compression encoder to generate an encoded bitstream of compressed graphics data," "transmitting a bitstream of compressed graphics data that is a representation of the already-compressed object data by using the buffer," "transmitting a bitstream of compressed graphics data that is a representation of the already-compressed

object data by using the URL," "transmitting a bitstream of compressed graphics data by using the buffer, wherein the bitstream is obtained by compressing the original data using the compression parameters," and "transmitting a bitstream of compressed graphics data by using the URL, wherein the bitstream is obtained by compressing the original data using the compression parameters," respectively.

Thus, for at least the same reasons presented with respect to the methods of claims 1 and 5, the methods of claims 29-33 each provide a practical application that produces a "useful, tangible, and concrete" result and are therefore directed to statutory subject matter under 35 U.S.C. § 101.

New Claim 34

Additionally, Applicants submit that new claim 34 is directed to statutory subject matter under 35 U.S.C. § 101 because the method recited therein provides a practical application that produces a "useful, tangible, and concrete" result. Claim 34 recites a method of generating an extensible MPEG-4 textual format (XMT) schema for use in meta representation of graphics data compression that includes, among other features, "defining a compression node which includes information regarding object data to be compressed," "defining an encoding parameter required for data compression," "defining BitWrapperEncodingHints which at least specifies a location of a file in which the object data to be compressed is stored," and "storing the compression node, the encoding parameter, and the BitWrapperEncodingHints as the XMT schema."

First, the result provided by claim 34 is "useful" because it is "specific." Applicants submit that the specification of the instant application discloses a specific use for the invention recited in claim 34 and identifies with specificity why it is

considered useful. (See, MPEP § 2107.01(I)(A)). For example, the specification of the instant application provides that, in one embodiment, factors required to compress 3D data, such as animation data or representation data, are defined with parameters in the XMT format. (See, Specification at page 8, lines 7-8). In this case, the factors for compression of the 3D data are defined in an XMT-A schema, using a node that represents compression of the 3D data. (See, Specification at page 8, lines 8-10). Thus, the author can compress 3D data based on this definition and transmit the compressed data. (See, Specification at page 8, lines 6-7).

Second, the result provided by claim 34 is also "useful" because it is "substantial." In particular, the method recited in claim 34 defines a "real world" use without requiring further research to identify such "real world" context of use. (See, MPEP § 2107.01(I)(B)). For example, the specification describes the exemplary "real world" context of graphics data writing, where easy compression of animation data and representation data related to 3D contents made by an author is desired. (See, Specification at page 1, line 13 and lines 25-27).

Third, Applicants submit that the "specific" and "substantial" utility identified above for the method recited in claim 34 would be considered "credible" by a person of ordinary skill in the art. (See, MPEP § 2107(II)(B)(1)).

Additionally, the result provided by claim 34 is "tangible" because it is not "abstract." (See, Interim Guidelines at IV(C)(2)(b)(2)). In other words, generating an XMT schema is a beneficial result or effect in that 3D data can be compressed based on this definition and transmitted. (See, Specification at page 8, lines 3-63).

Finally, the result provided by claim 34 is "concrete" because the result can be substantially repeatable. (See, Interim Guidelines at IV(C)(2)(b)(3)). For example,

each time the method of claim 34 is executed, an XMT schema for use in graphics data compression will be generated.

Thus, for at least all of these reasons, claim 34 provides a practical application that produces a "useful, tangible, and concrete" result and is therefore directed to statutory subject matter under 35 U.S.C. §101.

Claim Rejection Under 35 U.S.C. § 112

Claims 18-23 have been rejected under 35 U.S.C. § 112, first paragraph, as allegedly not complying with the written description requirement for not providing a clear description of a hardware implementation of the system. Applicants traverse the rejection for at least the following reasons.

As amended, claim 18 recites a system for generating an input file using a meta language regarding graphics data compression that includes, among other features, a processing unit which provides an XML schema, a processing unit which provides style sheets, and an XML parser which parses the input XML file based on the XML schema and the style sheets. Similarly, claim 20, as amended, recites a system for generating an input file using a meta language regarding graphics data compression that includes, among other features, a processing unit which provides an XMT schema, a processing unit which provides an XMT2BIFS style sheet, a processing unit which provides an XMT2MUX style sheet, and an XMT parser which parses the input XMT file based on the XMT schema and the XMT2BIFS and XMT2MUX style sheets.

The specification of the instant application describes a computer system capable of reading a computer readable medium embodying code. (See,

Specification at page 46, lines 3-8). Thus, Applicants submit that claims 18 and 20 comply with the written description requirement under 35 U.S.C. §112, first paragraph, because the disclosed computer system describes hardware that would inherently include processors for implementing the processing units and XML/XMT parsers recited in claims 18 and 20. Accordingly, Applicants respectfully request that the rejection under 35 U.S.C. §112, first paragraph, of claims 18 and 20, and of claims 19 and 21-23, which depend therefrom, be withdrawn.

Further, for at least the same reasons presented with respect to claims 18 and 20, Applicants submit that new claims 35-39 likewise comply with the written description requirement under 35 U.S.C. §112, first paragraph.



CONCLUSION

It is believed that this Response and Amendment is accompanied by the proper fee. However, if additional fees are required for any reason, please charge Deposit Account No. 02-4800 the necessary amount.

In the event that there are any questions concerning this paper, or the application in general, the Examiner is respectfully urged to telephone Applicants' undersigned representative so that prosecution of the application may be expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: December 20, 2006

By: Nicole D. Dretar
Nicole D. Dretar
Registration No. 54076

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620